

WEIGHING INDICATOR & HIGH SPEED TRANSMITTER



The SWIFT is a weighing indicator and high speed transmitter, especially indicated for process weighing & machinery, in both static and dynamic applications. Thanks to its design for DIN rail mounting, as well as the various possibilities of data transmission, digital inputs and outputs, makes it ideal for connection to PLC, PC and remote systems.

- **Display** 6 digit 10mm LED.
- **High resolution:** 24bits ADC with 16.000.000 internal divisions.
- **High speed reading:** 2400 measures per second.
- **Configuration and calibration by keyboard.**
- **Calibration by Masses or in mV/V**, allowing the start-up without masses entering the load cell capacity and sensitivity in mV/V.
- Selectable **digital filters**.
- **Calibration sealing** by software or mechanically.
- **Power up to 6 load cells (350Ω) or up to 12 load cells (700Ω).**
- **Communication RS-232 & RS-485** (Modbus RTU y ASCII).
- **Analogue output configurable** at 0-5V, 0-10V, 0-20mA y 4-20mA, with galvanic isolation.
- **3 Digital opto-isolated inputs** with status LED.
- **3 Digital outputs** to relay with status LED.
- **DIN rail** mounting.
- **Power supply** 10 - 28 V DC.
- **Applications:**
 - Process weighing in tanks & silos.
 - Industrial scales.
 - Filling and dosing.
 - Animal weighing scales.
 - Testing machinery.
 - Dynamic sorting scales.
 - Multihead scale.

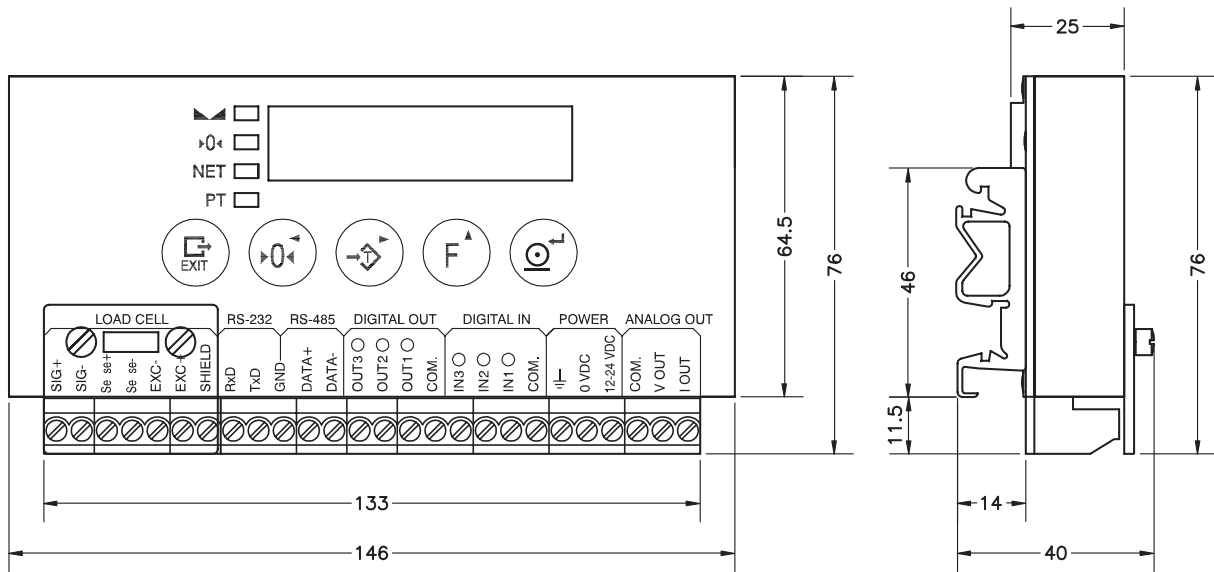
VERSIONS:

- **89450 SWIFT RS + ANALOGUE**

Complete version with serial outputs and analogue outputs

- **89451 SWIFT RS**

Version with serial outputs



Dimensions in mm.

Transport weight: 0.3 kg

TECHNICAL SPECIFICATIONS

Load cell connection:

Scale input signal range	± 3.9 mV/V
Resolution	ADC 24 bits; 16.000.000 internal divisions Display -99 999...999 999
Measuring rate	Internal: 2400 readings per second Transmission: 600 readings per second
Linearity error	≤ 0.01 % of measuring range
Thermal stability	Zero: 150 nV/°C max. Span: 3.5 ppm/°C max.
Load cell excitation voltage	5.0 V DC
Minimum load cell resistance	58 Ω (6 load cells of 350 Ω , 12 load cells of 700 Ω)

Inputs & Outputs:

Serial communications	RS-232 bi-directional RS-485 half-duplex Protocol: Own protocol, Modbus (RTU & ASCII) Transmission rates: 4800...115200 bauds selectable
Logical Inputs & Outputs	3 opto-isolated inputs with status LED 3 relay outputs max. 125V AC - 30V DC, 100mA, with status LED
Analogue output (Version Ref. 89450 SWIFT RS+ANALOGUE)	Output with galvanic isolation, DAC of 16 bits Output voltage: 0 -10V Output current: 0/4 - 20mA (<500 Ω)

Power, working condition and mechanical data:

Power supply	10V to 28V DC
Power consumption	4W (max.)
Temperature range	-20°C to 50°C operating; -25°C to 60°C storage
Dimensions & Weight	146,5 x 76 x 35 mm; 0,3 kg
Mounting	DIN rail, IP40
Operator interface	Display: 6 digit LED 10 mm; Keyboard: 5 keys